



PARADISE DISTRIBUTORS NORTHWEST

Water and Wastewater Specialists

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find us...

Welcome to PNW Inc.

PNW

- Aeration
- Bio-augmentation
- Filter media
- Ozone
- Cover
- Services

Latest Installation

- Eurika, MI
- Reardan, WA
- Willamina, OR
- Woodson, IL

Poll

What type of aeration do you have?

- ☐ Mechanical surface aerators
- ☐ Static aeration
- ☐ Bottom laid aeration
- ☐ Mixte: mechanical + bottom laid
- ☐ Other



Results | Files

CITY OF LAURELVILLE

During 2000, the City of Laurelville determined that improvements were necessary to improve facility performance to benefit the environment and position the City for federal regulations and also the more aggressive standards of treatment that will be required thereafter.

Laurelville also determined that if it could improve performance to the actual capabilities of their land area and infrastructure, the community may have an opportunity to treat municipal waste from an adjoining community and thus also lower overall per capita costs for Laurelville residents.

RATIONALE FOR AMTS UPGRADE:

Laurelville was impressed with the performance history of ADS and the predicted capability of AMTS to provide solid year round performance, even with the substantially reduced high cost associated with periodic sludge disposal. The quality treatment of mechanical plants in lagoons at significant savings in capital and operating costs. The AMTS process combines ADS's proprietary diffusion aeration products, engineering and bioaugmentation ("Bacta-Pur®") technologies to form a very stable, and efficient system for natural microbial treatment of municipal wastewater. Operational costs are low. Because of the efficiency of AMTS, sludge handling is typically not necessary.

Laurelville considered a number of different proposals and selected the AMTS because of the most impressive performance at low capital and O & M costs, all supported by a 5 year performance guarantee.

DESCRIPTION OF AMTS UPGRADE:

The basic goal of the AMTS for Laurelville was to convert and upgrade the existing facilities to a high performance lagoon system.

so that discharge requirements were consistently achieved with a comfortable margin. This included replacement of the diffusion aeration system. Existing 10 HP blowers were found acceptable and were retained to operate on standby in normal operations.

Above ground header pipe and high efficiency diffusion aeration tubing were installed in primary and second lagoons at a maximum of 10 foot centers. Baffles were installed in lagoons. The primary lagoons were also equipped with Bacta-Pur® Bactivator to meter and activate a quantity of XLG, a Bacta-Pur® sludge digesting product.

AMTS COSTS---CAPITAL, OPERATING AND MAINTENANCE:

Capital costs incurred by Laurelville for the AMTS upgrade were approximately \$180,000. This corresponds with an average annual per capita cost over a 10 year or 7 cents/person/day.

Operating and Maintenance costs for AMTS have compared favorably with existing costs. The upgrade did not increase the brake horsepower and system CFM requirements. Essentially remained unchanged at Laurelville since the system commenced in 1998. Average electrical costs per capita are approximately \$4.06/per person/year. Chlorination costs have been avoided entirely since completion of the upgrade. Coliform levels have been consistently in the single digits without chlorination; permit levels of over 200.

REFERENCES:

Mr. Ernest Hill
Superintendent
Laurelville WWTP
16111 Creamery Hill
Road
P. O. Box 217
Laurelville, Ohio 43135
Phone: (740) 332-9101

John Hinde
President
Air Diffusion Systems
3964 Grove Avenue
Gurnee, Illinois 60031
Phone: (847) 782-0044
Fax: (847) 782-0055
jhinde@airdiffusion.com